

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,213	02/28/2002	Shinichi Sato	11301-1481	8571
24504 75	11/02/2005		EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW			SERGENT, RABON A	
STE 1750	•		ART UNIT	PAPER NUMBER
ATLANTA, G	A 30339-5948		1711	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		ið.			
	Application No.	Applicant(s)			
· .	10/085,213	SATO ET AL.			
Office Action Summary	Examiner	Art Unit			
	Rabon Sergent	1711			
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet w	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR R WHICHEVER IS LONGER, FROM THE MAILIN - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory provided in the period for reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF THIS COMMUNION (FR 1.136(a). In no event, however, may a roun. Period will apply and will expire SIX (6) MON statute, cause the application to become AE	CATION. eply be timely filed THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	22 August 2005.				
	<u> </u>				
3) Since this application is in condition for all	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice un	der <i>Ex parte Quayl</i> e, 1935 C.D	. 11, 453 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) 46-50 is/are pending in the application 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 46-50 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction as	hdrawn from consideration.				
Application Papers					
9) The specification is objected to by the Exa 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the contact that the contact	accepted or b) objected to othe drawing(s) be held in abeyar orrection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119		·			
12) ⊠ Acknowledgment is made of a claim for for a) ⊠ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority docur 2. ⊠ Certified copies of the priority docur 3. □ Copies of the certified copies of the application from the International Books * See the attached detailed Office action for a	ments have been received. ments have been received in A priority documents have been ureau (PCT Rule 17.2(a)).	pplication No. <u>09/242,525</u> . received in this National Stage			
Attachment(s) 1) \(\sum \) Notice of References Cited (PTO-892)		Summary (PTO-413)			
Notice of References Cited (F10-632) Notice of Draftsperson's Patent Drawing Review (PT0-946) Information Disclosure Statement(s) (PT0-1449 or PT0/S Paper No(s)/Mail Date	Paper No(s	offiniary (F10413) s)/Mail Date nformal Patent Application (PTO-152)			

Application/Control Number: 10/085,213 Page 2

Art Unit: 1711

1. Claims 48 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Despite applicants' response and amendment, the process as it pertains to compound (i) remains indefinite. Specifically, the language within lines 4 and 5 of claim 48 is unclear with respect to what is being reacted. The language, "reacting a compound obtained by reacting a compound (eb) with a compound (fb) and further reacting with a compound (i)", is confusing, because it cannot be determined what is being initially reacted with the "obtained" compound, since compound (i) is claimed as being "further" reacted. In other words, there appears to be too many occurrences of "reacting".

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1711

3. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barron et al. ('844) or Zwiener et al. ('955).

Barron et al. disclose the production of curable urethane compositions wherein an isocyanate terminated prepolymer, derived from the reaction of a polyol with a polyisocyanate, is reacted with the reaction product of an aminoalkylalkoxysilane and a carbonyl or nitrile containing compound. See column 1, lines 50+; column 2, lines 59+; and column 3, lines 37-56.

Zwiener et al. disclose the production of alkoxysilane-functional polyurethane prepolymer, wherein an isocyanate terminated prepolymer, derived from the reaction of a polyol and a polyisocyanate, is reacted with the reaction product of an aminoalkylalkoxysilane and a maleic or fumaric acid ester. See column 2, lines 24+ and examples 6-9.

4. Applicants' process differs from the prior art processes in that applicants react the isocyanate with the amine functional alkoxysilane adduct to yield an isocyanate functional intermediate which is then reacted with the polyol, as opposed to reacting the isocyanate functional prepolymer with the adduct. The position is taken that the respective processes yield the same product and the only difference amounts to how the polyol is incorporated into the final product. This situation is considered to be analogous to changing the sequence of steps in a multi-step process, and it has been held that such a modification is obvious where an unexpected result is not obtained. *Ex parte Rubin* (POBA 1959) 128 USPQ 440; *Cohn v. Comr. Pats.* (DCDC 1966) 251 F Supp 378, 148 USPQ 486. Therefore, the position is ultimately taken that it would have been *prima facie* obvious to modify the reaction sequence of the prior art so as to arrive at the instant process.

Application/Control Number: 10/085,213

Art Unit: 1711

5. Applicants' response has been considered; however, the response is insufficient to remove the prior art rejection for the following reasons. Firstly, applicants' arguments within pages 8 and 10 concerning side reactions occurring within the references amounts to unsubstantiated opinion. Applicants have not provided evidence or logical rationale to support their position. Similarly, applicants have not substantiated their arguments with respect to molecular weight or viscosity, and it is noted that applicants' claims are not limited in accordance with these arguments. Secondly, applicants' arguments are largely based upon the position that the instant products have an OH group in the terminal; however, applicants' claims are not so limited. There is no requirement that such a terminal OH group exists or be produced. In summation, applicants' arguments are not commensurate in scope with the claims and applicants have in no way established that the respective processes yield distinct products.

Page 4

- 6. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krafcik ('604).
- Patentee discloses the reaction of an isocyanate functional material, a polyol, and an aminoalkyl silane, wherein the reaction is conducted by reacting the isocyanate functional material with the polyol to yield a product, which is then reacted with the aminoalkyl silane. See abstract; column 2, lines 30+; column 4, lines 37+; and column 5, lines 31+. Patentee further teaches at column 5, lines 24-30 that other processes may be employed to produce the composition of the reference.
- 7. While the prior art sequence of reaction differs from applicants, the position is taken that the same products are being produced. Therefore, since patentee teaches that different processes may be employed to produce the product, and since it has been held that changing the sequence of steps in a process is obvious where an unexpected result is not obtained (*Ex parte Rubin*

(POBA 1959) 128 USPQ 440; *Cohn v. Comr. Pats.* (DCDC 1966) 251 F Supp 378, 148 USPQ 486), the position is taken that it would have been obvious to modify the disclosed reaction sequence, so as to arrive at the instant process.

- 8. Applicants' response has been considered, however, the response is insufficient to remove the prior art rejection for the following reasons. Firstly, applicants' argument that Krafcik is drawn to a dispersion whereas the instant claim is drawn to a moisture curable product does not distinguish the claim from the prior art. Nothing in applicants' claim requires the product to be moisture curable and nothing in applicants' claim excludes the argued dispersions. The claim is open to virtually any step or modification. Secondly, applicants' argument concerning viscosity is not commensurate in scope with the claim; nothing requires the product of claim 50 to have low viscosity. Lastly, applicants have stressed that the product of claim 50 has a terminal OH group, however, applicants' claim is not so limited. There is no requirement that such a terminal OH group exists or be produced. In summation, applicants' arguments are not commensurate in scope with the claims and applicants have in no way established that the respective processes yield distinct products.
- 9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 1711

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

RABON SERGENT PRIMARY EXAMINER

R. Sergent October 30, 2005